MEMORANDUM

TO: Members, Clark Fork Basin Water Management Task Force (Task Force)
FROM: Gerald Mueller
SUBJECT: Summary of the February 4, 2008 Task Force Meeting
DATE: February 9, 2008

Participants

The following people participated in the Task Force meeting:

Task Force Members:

Harvey Hackett	Bitterroot
Fred Lurie	Blackfoot Challenge
Caryn Miske	Flathead Basin Commission
Ted Williams	Flathead Lakers
Arvid "Butch" Hiller	Mountain Water
Gail Patton	Sanders County Commissioner
Steve Hughes	Joint Board of Control & Lake County
Marc Spratt	Flathead Conservation District/Flathead Chamber of Commerce
Matt Clifford	Clark Fork Coalition

Ex Officio Members

Senator Verdell Jackson	Senate District 5

Public

Dr. David Shively	University of Montana, Department of Geography
Tim Bryggman	Montana Department of Natural Resources and Conservation (DNRC)
Mike McLane	Montana Department of Fish, Wildlife and Parks (DFWP)

Staff:

Curt Martin	DNRC
Gerald Mueller	Consensus Associates

Meeting Agenda

- January 7, 2008 Meeting Summary
- Updates
  - Hungry Horse Water Activities
  - Basin Water Supply and Growth Conference
- Water Policy Committee Interim Committee Bill Drafts
- Water Right System Policy Paper
- Public Comment
- Next Meeting

January 7, 2008 Meeting Summary

The Task Force made no change to the January 7, 2008 meeting summary.

Updates

Hungry Horse Water Activities - Tim Bryggman reported that DNRC has decided to send a letter to the US Bureau of Reclamation (BOR) to initiate the contracting process for water stored in

Hungry Horse Reservoir. The first step in the process is for BOR to conduct a study to reallocate the remaining Hungry Horse project costs to two new project purposes, municipal and industrial use. These categories correspond to federal project purposes, not state water right beneficial uses. The study is necessary because hydropower is the only project purpose currently repaying Hungry Horse project costs. DNRC will request that the study be based on the use of 100,000 acre-feet of stored water for municipal and industrial purposes. The 2007 legislature appropriated $260,000 to pay for this analysis. Because of the potential intersection of this contracting with the negotiation process between the state, federal government, and Confederated Salish and Kootenai Tribes (CSKT), DNRC is planning a call with BOR Regional Director Bill MacDonald to discuss the pending reallocation study request.

Question - Where and how would the water be used?
Answer - These details remained to be worked out, and there is time to do so.

Comment - The Hungry Horse contract may serve as a pilot for state contracts for water stored in other federal reservoirs.

Basin Water Supply and Growth Conference - Gerald Mueller and Dr. David Shively reported on preparation for the conference. All of the invited speakers have agreed to participate except a representative of CSKT and Bruce Measure, a Montana member of the Northwest Power and Conservation Council. Mr. Mueller wrote to CSKT Chairman Steele in December inviting a Tribal representative to address the compact negotiation. He followed the letter with an email to Clayton Matt, head of the Tribal Natural Resources Department. The Tribes have not yet replied. As a back up, Susan Cottingham, Program Manager for the Reserved Water Rights Compact Commission, has agreed to speak about the compact. Brian Marotz, Hydropower Coordinator for DFWP has replaced Bruce Measure to talk about constraints on the operation of Hungry Horse. Continuing education credits have been approved for conference attendance by the Montana Association of Engineers, the Montana State Bar, and the Board of Realty Regulation. The contract between the University of Montana and DNRC is still under development, but should be completed soon. The contract will provide funding for use of UM facilities, food, parking fees, speaker expenses (mileage for speakers traveling from outside of Helena and lodging for one night for the speaker from Bozeman), payment for a student to act staff for the event, and a report on the conference. Speakers will be asked to provide a summary or outline of their talks, and copies of the summary or outline will be compiled and supplied to conference registrants. The brochure has been posted on several web-sites so that people can begin registering. Rooms capable of accommodating 120 conference participants have been reserved in the University Center on the UM campus.

The Task Force discussed the conference brochure and made the following changes:
- The hours of continuing education credits allowed by the three organizations should be listed.
- DNRC Director Mary Sexton will open the conference.
- The speakers at 1:00 p.m. on March 11 addressing potential sources of water for growth should be combined into a panel, and John Tubbs, DNRC Water Resources Division Administrator, should be asked to moderate it.
- Instead of a separate presentation, Bill Schultz should be added to the 8:35 am panel on March 11 addressing who makes what decision in planning for growth. Mr. Schultz should speak after Steve Kilbreath.

The Task Force also reviewed a list of questions that will be supplied to each conference speaker to address in her or his talk. See Appendix 1. The Task Force asked for the following changes to the questions:

- Marc Spratt should address the basin geology in addition to hydrology.
- Anne Yates should be asked to include in her talk discussion of HB 831, which was passed by the last legislature in response to the TU vs. DNRC Supreme Court Decision.
- Steve Kilbreath and Myra Shults should be asked to address coordination between DNRC and DEQ in subdivision permitting.
- Dr. Nicklin should be asked to talk about how HB 831 mitigation is working in the field.
- Jim Carlson should be asked to discuss personal care product contamination of ground water.

Water Policy Committee Interim Committee Bill Drafts

The Task Force discussed the bill drafts prepared for consideration by the Water Policy Committee Interim (WPIC) and Mr. Mueller's January 16, 2008 memo. The memo is attached below as Appendix 2. Text of the bills is available on WPIC's web site, http://leg.mt.gov/css/lepo/2007_2008/water_policy/default.asp. The Task Force agreed to provide WPIC the following comments on the draft bills in the form of a letter. Mr. Mueller will circulate a draft of the letter to the Task Force for comments before mailing it to WPIC.

- LC5001, "Accelerated Permitting Bill" - No comment now. The Task Force will review any subsequent draft of this bill.
- LC5002, "Notice of Intent to Drill Bill" - A notice of intent would be more useful for exempt wells, so the county sanitarian would know where they will be installed and can prevent contamination by septic systems.
- LC5003, "Enforcement Bill" - WPIC should consider the Idaho approach to enforcement which allows local water users to form an advisory board that decides who to hire as a water commissioner and oversees the commissioner's work. The commissioner is a state employee and receives employee benefits. The commissioner also receives technical support and information from the state. All water rights holders in the decree enforced by the commissioners should share in the cost of the commissioner, rather than just those right holders that receive water as a result of the commissioner's actions.
- LC5004, "Community Water and Sewer Incentive Bill" - Incentives should be provided to encourage development of community water and sewer systems, but the local government priority allowed in LC5004 does not appear to be practical. Is there some way that the state could assist with funding community systems?
- LC5005,"MDT Reservation Bill" - No comment now.
- LC5006, "The Subdivision and Water Right Disconnect Bill" - No comment now. Members noted that requiring water rights before the final plat may be result in an onerous delay for developers because of the time required to finalize a water right through the contested case objection process.
- LC5007, "Ground Water Data Gathering Bill" - Additional funding for groundwater collection is a good idea, but it should be provided through the appropriation process.
- LC5008, "Issue Remark Bill" - No comment.
- None of these eight bills address exempt wells, which is a critical problem from the perspective of existing water rights and water management. In its 2004 *Clark Fork Basin Water*

Management Plan, the Task Force recommended amending the 35 gpm/10 acre-feet per year exemption to require a permit for ground water wells developed as a part of a common project, such as a subdivision.

Water Right System Policy Paper

The Task Force reviewed the draft paper dated January 2008, which Mr. Mueller had revised in light of comments at the January Task Force meeting. See Appendix 3. The Task Force agreed to two revisions to the paper and decided not to include recommendations in it. The revisions included placing footnote 46 in the text and adding a paragraph about return flows. Senator Jackson agreed to draft the return flow language. Task Force members have two weeks to send Mr. Mueller specific editing suggestions.

Public Comment

There was no additional public comment.

Next Meeting

Because of the March 10-11, 2008 conference, the next meeting was scheduled for Monday, April 7, 2008. The meeting will begin at 9:30 a.m. Lunch will be provided.

Appendix 1

Water Supply and Growth in the Clark Fork River Basin
Speaker Topics and Questions

Holly Franz - Montana water law basics, including the prior appropriation doctrine, how one obtains a water right pre- and post-1973, water right changes, ground water permitting in closed basins, etc.

Marc Spratt - What are the basic facts regarding the basin's hydrologic resources?

Anne Yates, DNRC Deputy Legal Counsel - What is the significance of the Thomson River Cogeneration and TU vs DNRC decisions? Are there other recent decisions of significance to the Clark Fork River basin?

Susan Ockert, Montana Department of Commerce Census and Economic Information Center - What are the historical, current and projected populations for the counties in the Clark Fork Basin? What are the age group historical, current and projected populations by age group?

Dick King, Missoula Area Economic Development Corporation CEO - What is the make up of the current economy of the Clark Fork River basin? What are the key economic drivers now and in the future?

Tim Bryggman, DNRC Economist - What is DNRC's projection of basin water use over the next 50 years, and how was it derived?

Myra Schultz, ESQ - Please summarize county growth policies, zoning, subdivision regulations, and critical area ordinances. What authority do they provide counties to regulate water supply?

Steve Kilbreath, DEQ Subdivision Review Program - Please summarize state regulation of subdivisions and how it relates to water supply. Does DEQ have new proposals it is likely to make to the 2009 legislature?

Michael Kakuk, ESQ - Please discuss growth and water supply regulation from the perspective of the building industry. What ideas can you offer as to how to improve present regulation?

Tim Davis, Montana Smart Growth Coalition - What is the Coalition, and what are its goals? What ideas can you offer as to how to improve present regulation?

Dr. Michael Nicklin, Nicklin Earth & Water - Why was HB 831passed and is it supposed to work? What ideas do you have for better addressing ground water and surface water interactions?

Bill Schultz, DNRC Regional Water Resources Manager - How does DNRC administer and enforce water rights? How does DNRC analyze physical and legal water availability for water rights permitting? How does DNRC regulate coordinated surface and ground water interactions? What exemptions exist in ground water permitting, and what is the significance of the exemption?

Jim Carlson, Missoula County Environmental Health Department - What better serves the public interest, individual or community water and septic systems, and why?

Rep. Jill Cohenour, Member of the Water Policy Interim Committee - Should ground water developments be exempt from water right permits? Which ones should be exempt? Will the WPIC agree on legislation addressing exempt wells?

Bill Gardner, Owner of Liberty Drilling - Please provide a well driller's perspective on ground water development and regulation.

Randy Overton, RLK Hydro - What is aquifer storage and recovery? Who regulates it? How does it or might it impact public water supplies?

Senator Jim Elliott, Chairman of the Water Policy Interim Committee - From the perspective of WPIC, what water supply/regulation issues are most important? What legislation is likely to come out of the WPIC deliberations?

Mike McLane, DFWP Water Resources Specialist - What are the potential sources (e.g., ground water, existing water rights, Hungry Horse reservoir) for the basin's water supply, and what are the advantages and disadvantages for each?

Brian Marotz, DFWP Hydropower Coordinator - What are the constraints on the operation of Hungry Horse reservoir that may affect its usefulness as a source of water for basin water users?

Confederated Salish and Kootenai Tribal Representative or Susan Cottingham, Reserved Water Right Compact Program Manager - Why are the state and CSKT negotiating a water rights compact? What is the status of the negotiations? How might that compact affect the basin's water supply?

Appendix 2

Upper Clark Fork River Basin Steering Committee

C/O Gerald Mueller
440 Evans
Missoula, MT 59801
(406)543-0026

MEMORANDUM

Date: January 16, 2008
To: Clark Fork Task Force
From: Gerald Mueller
RE: Water Policy Interim Committee Draft Bills

During the January 15-16 Water Policy Interim Committee (WPIC) meeting the public commented on and WPIC discussed the eight bills, LC 5001 - 5008. WPIC agreed to continue to consider all eight, plus two more. One of the additional bill drafts requested would establish a funding mechanism for infrastructure improvements in subdivisions representing "partnerships" between counties and developers. Except for the requirement that the subdivisions be in zoned areas, details of the nature of the partnerships remain to be set forth. I assume that partnership would mean that the subdivisions would have county approval. The other requested bill draft would ensure that the quality of water injected into the ground would be at least as good as that of the water removed. The next WPIC meeting will be in Helena on March a date to be determined.

The following reflects my notes on the public, agency and WPIC comments on each of the bills.

- LC5001, "Accelerated Permitting Bill" - This bill provides for an accelerated permitting process by allowing an applicant for an appropriation right in a basin closed to new appropriations to avoid submitting a hydrogeologic assessment if the applicant submits a mitigation plan or an aquifer recharge plan that provides for the offset of at least 100 percent of the amount of groundwater withdrawn by the proposed appropriation, regardless of the amount of net depletion to surface water or adverse affect. John Tubbs expressed the concern that this bill would shift the burden for conducting the hydrogeologic assessment from an applicant to either DNRC or objectors or both. DNRC and/or objectors would have to conduct the assessment to ensure that the mitigation or an aquifer recharge plan would offset 100% of groundwater withdrawn. Another concern is that the requirement for offsetting may not address impacts related to the timing or place of the withdrawal. In other words, the offsetting may not preserve the same conditions in the source of supply for senior water right holders. Finally, the bill does not specify what happens if the mitigation or aquifer recharge plan does not work as intended.
- LC5002 - "Notice of Intent to Drill Bill" - This bill allows a person to issue a notice of intent to drill a well for which a water permit is required, and provides that if no objections are received, then the department may issue a provisional permit. DNRC is concerned that this bill may require objections before a pump test is conducted. Pump tests are necessary for objectors to determine if they would be adversely affected by the new ground water appropriation. DEQ's Steve Killbreath stated that a notice of intent to file would not preclude DEQ permit requirements, including a pump test.

- LC5003 - “Enforcement Bill” - This bill creates a new division of water rights enforcement within DNRC headed by a state engineer. It charges the new division with the responsibility for the administrative enforcement of water rights and for administratively preventing the unauthorized use of water. The division would also employ water commissioners. The new division would be assigned enforcement responsibilities now exercised by the courts. Both John Tubbs and Anne Yates, DNRC’s water attorney, expressed concerns about specific provisions of this bill. The bill appears to require DNRC to administer all decrees, even if the local users do not request a commissioner. DNRC would act as both the enforcement entity and the judge in permit applications. A hearings examiner may also be able to impose costs on DNRC if DNRC is an unsuccessful objector. This bill would impose a new layer between water users and the court. Courts have more clout that DNRC officials would have in administering decrees. Senator Jent asked that the state engineer be autonomous, i.e. not under the authority of DNRC. Three members of the public commented that the existing water commissioner mechanism is working well in the West Gallatin, Willow Creek, and Burnt Fork drainages and prefer working under the authority of the district court. A former DNRC employee spoke in favor of the bill because it would provide benefits for commissioners. Another noted that the current method of paying for water commissioners is not fair because it places all costs on those water right holders who receive water rather than all right holders under the decree. Rep. Boggio stated that he remains interested in ways to improve enforcement to protect senior water rights.
- LC5004 - “Community Water and Sewer Incentive Bill” - This bill revises the laws relating to water quality for subdivisions by clarifying the authority of local governments to require community water supply systems and public sewer and waste water systems for subdivisions, authorizing state and local governments to give priority in the review process to subdivision applications that provide for community water supply systems and public sewer and waste water systems. Myra Schultz, a land use attorney, stated that 76-3-511has only been used once. Ravalli County Commissioner James Rokosch stated that counties must render a decision on subdivision applications within 60 days, and in light of this fact, it is not clear what is meant by “the local governing body may give priority to applications that provide...” He also stated that MEPA cannot be used as a decision making tool even for subdivisions that are so large that they amount to new towns. A better interface between MEPA and local subdivision decision making is needed. The county needs additional resources and more time to respond to large subdivision applications.
- LC5005 - “MDT Reservation Bill” - This bill was requested by the Montana Department of Transportation (MDT). It provides for the issuance of state water reservations for aquatic resource activities carried out in compliance with and as required by the federal clean water act of 1977 in all closed basins for surface water and ground water, provides that the water reservations may not be used for dilution and are not subject to a change of use, and exempts applicants for state water reservations for aquatic resource activities from the requirement of preparing a hydrological assessment or providing a mitigation plan. I asked WPIC about the utility of the bill, given that the reservation would have the most junior water right in a closed basin. Don MacIntyre responded to my question on behalf of MDT. He also talked with me privately. MDT needs a water right to receive credit for wetland mitigation under the federal Clean Water Act. A water reservation would allow MDT to make call on exempt wells and other more junior uses exempt from basin closures. It would also provide protection should closures be eliminated. This bill is not intended to allow MDT to divert additional water for

wetlands, an activity that would require a permit. MDT would use the reservation in the case where it would close off return flow ditches to create a wetland. Water would continue to flow to nearby water bodies, but would flow through the wetland rather than a ditch.

- LC5006 - "The Subdivision and Water Right Disconnect Bill" - This bill eliminates the disconnect between subdivision and water right permitting by final plat by requiring that approval for a subdivision may not be granted unless the applicant submits evidence that a permit to appropriate water has been obtained. Several commentors supported the purpose of the bill. Myra Schultz noted that the bill attempts to combine the decisions about the adequacy and legality of the water supply. She stated that 76-3-622 was modified by SB 290 in 2005. In SB 290, Realtors and the building industry successfully sought to preclude counties from making decisions on scientific issues, so that they can only be addressed by state agencies. Information collected under 76-3-622 should be supplied to the county for its decision. Don MacIntyre argued that to shorten the time required to obtain a water right, the process should be changed from a contested case to a negotiation process. The applicant, intervening parties, and DNRC would negotiate the conditions for the permit. Any dissatisfied party could then appeal the conditions to district court. Ravalli County Commissioner Rokosch noted that without addressing exempt wells, this bill would amount to putting bandages on a corpse. Ravalli County Commissioner Driscoll supported Commissioner Rokosch's comments. Steve Kilbreath stated that DEQ and DNRC have taken steps to address the disconnect between subdivision and water right permitting but have not eliminated it.
- LC5007 - "Ground Water Data Gathering Bill" - This bill provides that the Montana Bureau of Mines and Geology shall develop and implement a ground water investigation program for the purpose of collecting and compiling ground water and aquifer data. The program shall gather data, compile existing information, conduct field studies, and prepare a detailed hydrogeologic assessment report for each subbasin. The program shall develop a monitoring plan for each subbasin for which a report is prepared. The program is funded by an additional fee on each water permit application, each subdivision application, or on each welllog. The combination of funding needs to raise about $1.2 million for the biennium in order for the bureau to complete 2 subbasins each biennium. Several WPIC members supported the need to conduct a hydrogeologic assessment of the state's ground water on a subbasin bases. Representative McNutt appealed for support from the public for the appropriation. Ravalli County Commissioner Rokosch stated that a dire need exists for ground water data compatible with GIS. John Tubbs noted that an advisory committee already exists for the MBMG's ground water assessment program. He also expressed concern that the hydrogeologic assessment required under this bill not substitute for the assessment required for a specific application under HB 831.
- LC5008 - This bill provides that: the chief water judge shall resolve all issue remarks on claims that have received an objection, whether each issue remark is subject to an objection or not; prior to an enforcement action pursuant to 85-2-406, the chief water judge shall resolve all issue remarks related to flow rate or volume; and a temporary preliminary decree or preliminary decree or a portion of a temporary preliminary decree or preliminary decree may be enforced prior to final resolution of all issue remarks in certain instances. There were no comments in opposition to this bill.

Appendix 3

Status of the First-In-Time, First-In-Right Water Right Allocation and Management System

Although it did not begin this way, today's Montana water law is based on the prior appropriation doctrine which is commonly summarized by "first-in-time, first-in-right."[1] First-in-time, first-in-right means that water use is based on water rights with a priority determined by when water was first put to a beneficial use. Increased competition for water resources and increased management complexity are creating challenges for implementation of this doctrine. The challenges result from reliance on individual water users for administrative and enforcement that threatens the viability of water rights, groundwater development that impacts surface water, choices related to domestic water sources, and federal statutes and regulations that constrain the operation of federal water projects and river flow. This paper is prepared by the Clark Fork River Basin Task Force (Task Force)[2] to review the status of Montana's water allocation and management system and then to examine the challenges to it.

History of Montana Water Allocation and Management

Pre-1973

Prior to the passage in 1973 of the Montana Water Use Act, the right to use water in Montana was obtained simply by putting it to a beneficial use.[3] No central compilation of water rights existed. Resolution of water right disputes and adjudication of water rights occurred in local courts in actions brought by individuals.[4]

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[1]In 1894, the Montana Territorial Legislature established the riparian doctrine as the means of allocating water. In this system, title to water is granted to landowners whose property is adjacent to rivers and streams. It was not until 1921 that the Montana Supreme Court rejected the riparian system in favor of prior appropriation. See Shovers, "Diversions, Ditches, and District Courts," *Montana - The Magazine of Western History*, Spring 2005.

[2]The Clark Fork River Basin Task Force was created in 2001 pursuant to a state statute, 85-2-350 MCA. This statute requires that members of the Task Force be representative of the water interests and sub-basins in the Clark Fork River basin. It charged the Task Force with developing a water management plan for the basin that identified options to protect the security of water rights and provided for the orderly development and conservation of water in the future. The Task Force presented the *Clark Fork Basin Watershed Management Plan* to Montana's governor and legislature in September 2004. The *Plan* was subsequently adopted by the Montana Department of Natural Resources and Conservation into the State Water Plan. For more information about the Task Force see http://dnrc.mt.gov/wrd/water_mgmt/clarkforkbasin_taskforce/default.asp.

[3]Stone, *Selected Aspects of Montana Water Law*, 1978, page 28.

[4]In 1903, the Montana Legislature established the Montana State Engineer's Office and charged the State Engineer with surveying the state's water systems to determine annual flows and with overseeing implementation of an 1894 federal statute that allowed private companies to develop irrigation systems. In 1934, the Legislature created the Montana State Water Conservation Board (SWCB) and authorized it to investigate and fund water storage and irrigation projects. In 1965, the Legislature abolished the Montana State Engineer's Office. Two years later, it replaced the Montana State Water Conservation Board with the Montana Water Resources Board (MWRB) and directed it to prepare a state water plan. See Shovers, "Diversions, Ditches, and District Courts," *Montana - The Magazine of Western History*, Spring 2005. According to Shovers, the same 1967 statute required "...that all water-right holders must make a declaration of their appropriation to their county clerk, who, in turn, would forward them to the board in Helena to be compiled into a comprehensive inventory of water resources." The Board did not compile a comprehensive inventory. Neither the State Engineer, SWCB, nor MWRB had the authority to resolve water right disputes or adjudicate water rights. This authority remained in local courts.

Post 1973

In 1972, Montanans adopted a revised Constitution. One of its articles addresses water directly. Another may do so indirectly. Article IX, Section 3 of the new Constitution includes several provisions regarding water and water rights. It recognizes and confirms existing water rights. It asserts that "All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people..." It subjects state waters "...to appropriation for beneficial uses as provided by law," and requires the legislature both to "...provide for the administration, control, and regulation of water rights and ... establish a system of centralized records, in addition to the present system of local records." In response to latter directive, the Montana legislature passed the Montana Water Use Act in 1973. This Act established a centralized record system for water rights and required that all water rights existing prior to July 1, 1973 must be finalized through a state-wide water rights adjudication in state courts. It also provided that a new water right or a change to an existing right requires a permit from the Montana Department of Natural Resources and Conservation (DNRC).[5] Article II, Section 3 states that Montanans' unalienable rights include, "…the right to a clean and healthful environment and the rights of pursuing life's basic necessities…" Although neither statute nor court rulings have done so, the clean and healthful environment provision might be construed to prevent DNRC from allocating or managing water in a manner detrimental to "clean and healthful," irrespective of the prior appropriation doctrine. As will be discussed below, Article II, Section 3 may also affect appropriations of water for people's "basic necessities."

Adjudication

To facilitate the state-wide water right adjudication, the legislature passed SB 76 in 1979. SB 76 mandated a comprehensive adjudication of all pre-1973 water rights in a newly created Montana Water Court. It also created the Montana Reserved Water Rights Compact Commission and charged it with negotiating federal and tribal reserved water rights.[6] Twenty-five years later, the Water Court had issued six decrees that are sometimes labeled as final, but will have to be re-opened.[7] A major reason for the slow pace of the adjudication was insufficient staff and funding for the DNRC to carry out its claims examination responsibilities.[8] In 2005, the legislature passed a water rights fee to increase funding to DNRC and the Montana Water Court in an

[5] *Water Rights in Montana*, published by the Montana Department of Natural Resources and Conservation, the Legislative Environmental Quality Council, and the Montana University System Water Center, February 2006, page 3.

[6] Federal reserved water rights were created by the United States Supreme Court in its ruling in Winters v. United States [206 U.S. § 564 (1908)]. The Supreme Court held that when Congress or the President sets aside land out of the public domain for a specific federal purpose, such as an Indian reservation, National Park, or National Forest, a quantity of water is impliedly reserved which is necessary to fulfill that primary federal purpose. A federal reserved water right has a priority date as of the date the land was withdrawn and the reservation was created; it cannot be lost through nonuse.

[7] *See* Mont. Code Ann. § 85-2-237 (reopening and review of decrees). The Water Court has determined that 30 temporary decrees are enforceable.

[8] "White Paper on the Montana Water Rights Adjudication" issued by the Upper Clark Fork River Basin Steering Committee on March 2, 2004, page 8.

attempt to complete the adjudication by 2020. DNRC has hired 30 additional staff and was on pace to complete its examination work by 2015.

Surface Water Appropriations

Historically, under the prior appropriation doctrine, Montanans obtained water for new uses by acquiring new surface water rights. However, by 2007 the era of new surface water rights supporting new uses was essentially over. Many of Montana's major river basins were closed to new surface water rights, with specific exceptions for some uses. The closed basins included the upper Missouri, Jefferson, Madison, Teton, upper Clark Fork, Bitterroot, and the Musselshell. The mainstem of the Milk River was closed. A recent DNRC ruling had effectively closed the Clark Fork River basin to new surface water rights.[9] Several individual creeks were also closed by petition and administrative orders during a portion of each year. Water right compacts with federal agencies and Indian tribes had closed certain water sources to new appropriations.[10] The reason for these closures was the recognition that these basins have no more surface water to appropriate for new water rights. Even in areas not closed, a new surface water right would be the most junior for a given water source. The new user would be entitled to "wet" water only after all other senior rights are satisfied. Basing significant economic activity on a new junior water right would likely be a risky proposition.

The 1973 Water Use Act allowed state or federal agencies or political subdivisions of the state to apply to the Board of Natural Resources and Conservation to reserve water for present and future beneficial uses, including instream flows and water quality.[11] Reservations were granted for the upper and lower Missouri River basins and the Yellowstone River basin.[12] No provision has been made in other Montana basins to reserve water for future use.

The ending of the era of new surface water rights means that new water uses will depend on one or more of four mechanisms: changes to existing water rights, purchases of existing rights, contracting for stored water, or using ground water. Ground water will be discussed in the next section of this paper. The efficacy of changes to or purchases of existing rights depends on two things, completion of the water right adjudication so that one can be confident in the status of a pre-1973 water right and the user friendliness of the administrative system for changing water rights. While some water may be available from privately or state owned reservoirs and other water bodies, the most likely source of storage for new water uses is the large federally owned reservoirs: Fort Peck, Tiber, Canyon Ferry, Hungry Horse, Koocanusa, and Yellowtail. Contracts from these reservoirs will also be discussed below.

Ground Water Appropriations

[9]See the Final Order issued by DNRC denying Application No. 76N-30010429 by the Thompson River Lumber Company.

[10]For a complete listing of closures created by statute, administrative action, and compact, see *Water Rights in Montana*, February 2006, pages 36-40.

[11]Draft Environmental Impact Statement, Upper Clark Fork Basin Water Reservation Applications, Montana DNRC, December 1988, page 1 -2.

[12]Donald MacIntire, "The Prior Appropriation Doctrine in Montana," *Montana Law Review, Volume 55, No. 2,* Summer 1994, page 322.

Montana first began to regulate ground water development in 1961 when the legislature passed a ground water code establishing a system for appropriation of ground water.[13] This code allowed DNRC to "...administratively close a ground water aquifer to further appropriation or to restrict or condition existing or future ground water allocations on the basis of water quality concerns by establishing a controlled ground water area."[14] The 1973 Water Use Act required DNRC permits for ground water developments of 100 gallons per minute or more. In 1991, the legislature recognized the significance of ground water as a supply for Montana water users and passed the Montana Ground Water Assessment Act establishing the Montana Ground Water Assessment Program to characterize and monitor the state's ground water and conduct long-term, statewide monitoring of ground water quality and water levels.[15] Also in 1991, the legislature changed the definition of ground water developments exempt from DNRC water right permitting to 35 gallons or less per minute and 10 acre-feet per year or less.[16]

Federal Storage Reservoirs

Beginning in the 1930s and continuing through the 1970s, the federal government constructed several large dams and reservoirs in Montana. In order of construction, these were the Fort Peck, Hungry Horse, Canyon Ferry, Tiber, Yellowtail, and Libby Dams. The agencies charged with operating these dams, the United States Bureau of Reclamation (BOR) and the United States Army Corp of Engineers (COE) filed water rights with the state claiming the right to store water to market it to water users for various purposes.[17] In response to concerns about the marketing of Montana water for industrial purposes, especially for coal slurry pipelines, the 1983 Montana legislature created the Select Committee on Water Marketing (Committee). In response to recommendations from the Committee,[18] the 1985 legislature created a state water leasing program for the purposes of limiting the total amount of water that the state could lease and providing revenue to the state. The limit was 50,000 acre-feet. The Committee recommended and the legislature authorized the state to obtain water for any beneficial use from existing federal reservoirs, Fort Peck, Hungry Horse, Canyon Ferry, Tiber, and Yellowtail, provided that the state had an agreement between the state and federal government to share the revenue from marketing the water.[19] The state negotiated a contract with the COE for Fort Peck water, but did not market any of it. This contract expired in 1980s, and was not renewed.

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[13]"Managing Montana's Water" at http://water.montana.edu/pdfs/headwaters/headwaters6.pdf, page 4. Prior to the effective date of the ground water code, January 1, 1962, ground water could be appropriated only if it flowed in a "permanent, defined, and known channel." See Doney, *Montana Law Handbook*, published by the State Bar of Montana, October 1981, page 134.

[14]Donald MacIntire, "The Prior Appropriation Doctrine in Montana," *Montana Law Review, Volume 55, No. 2,* Summer 1994, page 322.

[15]5http://www.mbmg.mtech.edu/grw/grwassessmemt.asp.

[16]Curt Martin, "Wells Exempt from the Permitting Process", unpublished paper presented to the Legislative Interim Water Policy Committee on September 13, 2007.

[17]COE constructed and operates Fort Peck and Libby Dams, and BOR constructed and operates Hungry Horse, Canyon Ferry, Tiber, and Yellowtail Dams.

[18]*Summary of the Report of the Select Committee on Water Marketing to the 49th Legislature*, January 1985.

[19]85-2-141(3) MCA.

In 2007, the Task Force successfully sought legislation to raise the cap from 50,000 to 1,000,000 acre-feet on the amount of water that the state can lease for beneficial uses when the source of the water is a federal reservoir and when the water leased is not used to transport water out of the basin in which the reservoir is located. The legislation also eliminated the requirement that water marketing revenue be shared between the state and federal government. The Task Force sought this legislation to use Hungry Horse water to provide for future water uses in the Clark Fork River basin and to protect uses of water in the basin that are junior to lower basin hydroelectric water rights.[20]

Challenges to the Prior Appropriation System

Administrative and Enforcement Challenges

Water is the only natural resource that the state claims to own. According to the Constitution, the purpose of state ownership is to ensure its beneficial use by Montanans. However, the authority of DNRC, the agency assigned with the task of providing for the administration, control, and regulation of water rights, is limited. In his article entitled "Diversion, Ditches, and District Courts" published in *Montana the Magazine of Western History*, Brian Shovers wrote that Montana irrigators historically "... preferred the uncertainty and cost of litigation to established limits imposed by a centralized system." Rather than DNRC, the responsibility for adjudicating and enforcing water rights and resolving water disputes has been "...entrusted to ditch riders, water masters, and district court judges."[21]

In the adjudication process, DNRC's role is limited to examining water rights claims, and placing remarks identifying problems on them. DNRC does not act as an institutional objector, an entity assigned with examining all claims and filing objections to errant claims. Individual water right holders in a given decree bear this burden. In a policy paper discussing the implications of completing the state-wide water rights adjudication, the Upper Clark Fork River Basin Steering Committee wrote, "In larger basins with thousands and in some instances tens of thousands of water rights claims, individual water users cannot be expected to have the knowledge, willingness, and financial resources necessary to scrutinize every claim and to pursue more than a few objections."[22] Ameliorating this concern somewhat is the fact that claims with DNRC issue remarks to which no objections are filed by individual water right holders must be heard before the Water Court. DNRC staff must appear and explain their remarks. The Montana Water Court must address DNRC issue remarks prior to the issuance of final decrees.[23]

DNRC is not the state's water cop. It plays no role in enforcing pre-1973 water rights. Since the passage of the 1973 Water Use Act, it can seek to enforce water right permits by filing actions in

[20] *Clark Fork Basin Watershed Management Plan,* Chapter 6, Hydropower Water Rights and Basin Water Use, pages 73-78, September 2004.

[21] Shovers, "Diversions, Ditches, and District Courts," *Montana - The Magazine of Western History*, Spring 2005, page 14.

[22] "White Paper on the Montana Water Rights Adjudication" issued by the Upper Clark Fork River Basin Steering Committee on March 2, 2004, pages 5-6.

[23] *Water Rights in Montana*, page 12-13.

district court. However, because of staffing and funding limitations, DNRC has almost never used its authority to go to court.

The enforcement burden falls almost entirely on individual water right holders. Individuals can make calls on junior users and file lawsuits in district court to enforce their water rights. Water users with in an enforceable water rights decree can petition district court to appoint a water commissioner to act as the court's agent and allocate the available supply of water according to the decree water right priority dates. The cost of the water commissioner is borne only by those water users receiving water pursuant to the commissioner's action rather than by all those subject to the decree. Water commissioners generally work only during the irrigation season and are not provided benefits such as health insurance and sick leave. In some areas, finding someone willing to serve as a commissioner has already been a challenge. As local water right decrees are integrated in the adjudication process, enforcing decrees will become more challenging and may involve a hierarchy of commissioners.

DNRC's administrative permit process for obtaining and changing water rights also places a substantial time and cost burden on water users. As is the case with the adjudication process, individual water rights holders have the right to object to permit applications for new or changed uses. Because these objections are heard in a contested case procedure, participants generally choose to be represented by legal counsel. Permit processes often last a year or more.

Because of Montana's reliance on the judicial system and contested case administrative processes, the burden on individual water users to adjudicate, enforce, protect, and make changes to existing rights can literally take years and tens of thousands of dollars. This burden is increasingly problematic for traditional water users such as farmers and ranchers. A right that cannot be defined, enforced, protected, and/or changed, has little or no value.

Water administration and management has generally followed a more centralized approach in the other western states than has been the case in Montana.[24] The best example of the centralized model is Wyoming. Article 8, Section 2 of Wyoming's 1889 constitution provides:

> There shall be constituted a board of control, to be composed of the state engineer and superintendents of the water divisions; which shall, under such regulations as may be prescribed by law, have the supervision of the waters of the state and of their appropriation, distribution and diversion, and of the various officers connected therewith. Its decisions to be subject to review by the courts of the state.[25]

Granting DNRC more authority to administer and enforce water rights could reduce the burden on individual water users. DNRC could be directly authorized to investigate and enforce existing water rights and resolve disputes. It could, for example, hire, train, and provide technical and administrative support to water commissions who would enforce water rights decrees. Given clear criteria for doing so, DNRC could also play a more authoritative role in administration processes reducing the role of objections to speed decisions. Individuals could be allowed to appeal DNRC decisions to district court.

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[24] Shovers, pages 6-7. Also, see "How Will Completion of the Adjudication Affect Water Management in Montana?" prepared by the Upper Clark Fork River Basin Steering Committee, February 2006, pages 6-9. This paper is available at http://dnrc.mt.gov/wrd/water_mgmt/clarkfork_steeringcomm/completionof_adjud_rpt.pdf.

[25] A copy of the Wyoming Constitution is available at http://soswy.state.wy.us/informat/05Const.pdf.

These changes to create a more centralized water right process would require legislation to increase DNRC's authority, staffing and budget. They would also require a greater willingness on the part of individual water right holders to trust and accept a more assertive and intrusive DNRC. Maintaining the existing system with its burden on individual responsibility may come at the cost of an effective loss of water rights by those for whom the time and expense of hiring attorneys and pursuing court action is increasing unaffordable.

Groundwater and Surface Water Interactions

Another factor that is changing the first-in-time, first-in-use, prior appropriation system is the increased acknowledgment of ground and surface water interactions.

As noted above, the Montana Constitution provides that "All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law." According to DNRC, since passage of the 1973 Water Use Act, "Any person planning new or expanded development for a beneficial use of water from surface or ground water after June 30, 1973, must obtain a Permit to Appropriate Water or file a Notice of Completion of Ground Water Development to get a Certificate of Water Right."[26] These provisions do not necessarily mean that surface and ground water will be administered and managed as a unitary resource. Legislative staff of the Interim Water Policy Committee recently wrote, "Montana law does not provide for conjunctive management or enforcement of surface water and ground water rights."[27]

Montana basin closure laws did, however, recognize the close relationship between surface and ground water, and defined ground water to mean "...water that is beneath the land surface or beneath the bed of a stream, lake, reservoir, or other body of surface water and that is not immediately or directly connected to surface water."[28] Because these statutes did not define "immediately or directly connected," DNRC interpreted this phrase to mean "...that a ground water development could not pull surface water directly from a stream or other source of surface water.[29] The Montana Supreme Court invalidated this interpretation in the Montana Trout Unlimited (TU) vs. DNRC case because it "...recognizes only immediate connections to surface flow caused by induced infiltration and ignores the less immediate, but no less direct, impact of the prestream capture of tributary groundwater."[30] This decision halted DNRC processing of water right permit applications in statutorily closed basins incorporating the "immediate and direct" definition of ground water.

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[26] *Water Rights in Montana*, page 16.

[27] Krista Lee Evans, "A Summary of Montana Water Use Law," page 6, June 2007. This paper is available at http://www.leg.mt.gov/content/lepo/2007_2008/water_policy/staffmemos/waterlawsummary.pdf. This statement may be too strong because case law does provide for conjunctive management.

[28] See 85-2-342(3) MCA, 2005. This language was included in the basin closure statutes for the Upper Missouri, Teton, Jefferson, Madison, Teton, and Upper Clark Fork River basin closures.

[29] Montana Supreme Court decision in Case Number 05-069, Trout Unlimited vs. DNRC, page 6, April 11, 2006.

[30] Ibid, page 19.

In response to this Supreme Court decision, the 2007 legislature passed House Bill 831. HB 831 was entitled:

> "An act revising water laws in closed basins; defining terms in water use laws; amending requirements for an application to appropriate ground water in a closed basin; providing that certain applications to appropriate surface water are exempt from closed basin requirements; providing requirements for hydrogeologic assessments, mitigation plans, and aquifer recharge plans; providing minimum water quality standards for certain discharges of effluent; requiring that previously approved plans that were not located in the Clark Fork basin must meet certain criteria; requiring that data be submitted to the Bureau of Mines and Geology; providing for rulemaking; providing for a case study and requirements and a fee for participation in the case study; recognizing and confirming existing appropriation rights in certain instances; providing an appropriation; amending sections 85-2-102, 85-2-302, 85-2-311, 85-2-329, 85-2-330, 85-2-335, 85-2-336, 85-2-337, 85-2-340, 85-2-341, 85-2-342, 85-2-343, 85-2-344, 85-2-402, and 85-2-506, MCA; repealing section 85-2-337, MCA; directing the amendment of ARM 36.12.101 and 36.12.120; and providing an immediate effective date and applicability dates an applicability date."

This title befitted the complexity of the legislation's content. HB 831 required an applicant for a new well in a closed basin to provide a hydrologic assessment conducted by a hydrologist, qualified scientist, or qualified licensed professional engineer demonstrating whether the new appropriation would result in a net depletion of surface water. If a net depletion would result, the applicant must also assess whether it would result in an adverse effect on an existing water right. If an adverse effect is predicted, the applicant must file a plan for mitigating that impact. The bill also appropriated $500,000 to MBMG to conduct a case study to determine minimum standards and criteria for the hydrologic assessments.

Although the TU vs. DNRC decision and HB 831 apply strictly only to basins closed to most new surface water rights, the requirement to address prestream capture of tributary groundwater, i.e., the interception of ground water that would otherwise flow to a surface water body, and for mitigation plans will undoubtedly be applied to all ground water permitting. DNRC cannot issue a permit for a new water right or a change to an existing right without finding that the new or changed use would not adversely affect any existing right. Applying the adverse effects test to new ground water developments will require assessing prestream capture. Ground water applicants whose development would result in both prestream capture and an adverse affect will likely have the opportunity to offer plans to mitigate it.

DNRC's proposed rules for determining net depletions pursuant to HB 831 require an applicant to determine the "Propagation of drawdown from a well or other groundwater diversion and rate, timing, and location of any resulting surface water depletion effects."[31] Timing is a key issue for managing and enforcing surface and ground water rights in a prior appropriation system. The impacts of ground water development on surface flows may take place over months or years

[31]DNRC, "Notice of Public Hearing On Proposed Amendment in the Matter of the Proposed Amendment of Arm 36.12.101, Definitions and Arm 36.12.120, Basin Closure Area Exceptions and Compliance," August 13, 2007, available at http://dnrc.mt.gov/About_Us/notices/august/36-22-12.pdf.

rather than immediately.[32] Although Montana's laws apparently do not provide conjunctive management or enforcement of surface and ground water, neither do they preclude it. As ground water development continues, surface water holders may decide that protecting their rights requires enforcement of their priority dates against wells. Water rights calls on wells have occurred in Idaho to protect surface rights. Montana law allows junior users to defend against calls by seniors if the call would be futile, i.e., that the call would not result in water for use by the senior right holder.[33] How futile calls would be applied to ground water wells with a delayed impact on surface water is not known. DNRC has written, "Ground-water use is difficult to curtail to avoid impacts to surface water users during water shortages under a prior appropriations system."[34]

The complexity of ground water development and use and its interaction with surface water does not bode well for the strict application of the prior appropriation doctrine.

Domestic Water Supply

Article II, Section 3 of the Montana Constitution recognizes the right to pursue "life's basic necessities" as one of Montanan's unalienable rights. One might assume that because water is a basic necessity, Montana water law would give domestic use priority. All other states subject to the prior appropriation doctrine provide such a priority in either in their constitution or by statute. In Montana, with two exceptions, priority of water use depends only on the date on which water was first put to a beneficial use or on which a permit was acquired. One exception applies within controlled ground water areas. In such an a area, "...preferences can be imposed on existing rights to withdraw ground water, with domestic and livestock uses having first preference."[35] The other exception is a priority of water reservations in the Yellowstone River basin over certain water permits.[36] Cities and towns have the right to condemn water rights to provide a water supply for municipal and domestic water systems.[37] Individuals cannot.

One aspect of current water law has had a large impact on the way people develop water for domestic use. As previously mentioned, since passage of the 1973 Water Use Act, certain ground water developments have been exempt from DNRC permit requirements. Current law provides that:

> Outside the boundaries of a controlled ground water area, a permit is not required before appropriating ground water by means of a well or developed spring with a maximum

[32]Kendy, E. and J.D. Bredehoeft, 2006, "Transient effects of groundwater pumping and surface-water irrigation returns on stream flow," *Water Resources Research*, V. 42.

[33]*Clark Fork Basin Watershed Management Plan*, Chapter 4, Legal Framework for Water Management, page 66, September 2004.

[34]DNRC unpublished paper provided to the Water Policy Interim Committee for its January 15-16, 2008 meeting.

[35]Doney, *Ibid*, page 34.

[36]85-2-603(2) provides, "A reservation established before an application for permit is granted is a preferred use over the right to appropriate water pursuant to the permit, and the permit, if granted, must be issued subject to that preferred use."

[37]Doney, *Ibid*, page 33.

> appropriation of 35 gallons a minute (gpm) or less, not to exceed 10 acre-feet a year (ac-ft/yr), except that a combined appropriation from the same source from two or more wells or developed springs exceeding this limitation requires a permit.[38]

To obtain a water right for a beneficial use of ground water subject to this exemption, the developer need only file a notice of completion with DNRC within 60 days of completing the well or developed spring.[39]

This exemption, together with DNRC's interpretation of "combined appropriation," has influenced how subdivisions have been developed in Montana, particularly in the fastest growing areas in the western portion the state. DNRC rules provide that a combined appropriation means, "...an appropriation of water from the same source aquifer by two or more groundwater developments, that are *physically manifold into the same system*."[40] (Emphasis added.) This definition and the exemption allows a subdivision developer to avoid the time and expense of obtaining DNRC and Montana Department of Environmental Quality (DEQ) permits before water can be developed and used.[41] Instead of providing the subdivision with a community water supply and system, the developer can sell lots and leave each purchaser to dig an individual well. Over the last five years, 80% of the lots approved by DEQ were supplied by exempt wells rather than community water systems.[42]

Between July 1, 1973 and September 1, 2007, DNRC issued 104,142 certificates of water rights for exempt ground water developments. Seventy-five percent of all of the 104,142 certificates listed domestic use as a purpose of use.[43] DNRC estimates that by the of end 2007, it will have issued about 40,000 certificates for exempt wells using the 35 gpm/10 ac-ft/yr definition that came into effect in 1991. Over half of the 40,000 will have been issued in Gallatin, Lewis and Clark, Missoula, Ravalli, and Flathead Counties, and over 80% will have been issued in just 14 counties, only 3 of which are outside of western Montana.[44] DNRC estimates that if the current ground water permit exemption remains in effect, somewhere between 32,000 and 78,000 additional certificates for exempt wells will be issued by January 1, 2020.

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[38]85-2-306(3)(a) MCA.

[39]85-2-306(3)(b) MCA.

[40]36.12.101(14) ARM.

[41]*Water Rights in Montana*, page 18 and 17.38.202(5) ARM.

[42]Private communication from Curt Martin, December 19, 2007.

[43]Martin, pages 1 and 2.

[44]The 14 counties are Ravalli, Flathead, Gallatin, Lewis and Clark, Missoula, Yellowstone, Lincoln, Madison, Park, Lake, Jefferson, Carbon, Cascade, and Sanders.

Under current law, the holder of a surface water right is entitled to the same conditions in the source of supply as of the priority date of his or her water right.[45] While an individual 35 gpm/10 ac-ft/yr ground water development may have a negligible impact on a aquifer and surface water connected to it, the impact of multiple exempt wells may be significant. Before DNRC issues a permit to appropriate water or to change an existing water right, it must find that water to support the new or changed use is both physically and legally available and that no existing right would be adversely affected.[46] Existing right holders have the opportunity to object to a permit application to protect their rights. However, because they do not require DNRC permits, exempt ground water users avoid these tests. DNRC has noted that new exempt wells are not subject to the provisions of HB 831 which were designed to ensure that ground water pumping does not adversely affect senior surface water right users.[47] Senior water rights holders can make call on junior exempt wells. However, as discussed above, the delayed impact of ground water withdrawals on surface water may make calls problematic.

Another important source for local domestic water supplies is irrigation which charges local aquifers. In Montana, two changes are occurring that may threaten this source. First, irrigated lands are being sold and converted to other land uses. Second, flood irrigation has been converted to sprinklers to better match water application to crop needs. Both changes reduce the flow of water to the aquifer and may, therefore, reduce the amount of water available for domestic wells depending on local conditions. The eastside benches in the Bitterroot Valley below the Bitterroot Irrigation District ditches, Daly ditches, and the Supply ditch and areas west of Billings are examples of areas in which reductions in irrigated agriculture are adversely affecting domestic wells. Current law does not provide tools for domestic ground water users to protect against such changes.

The demand for water for domestic use will continue to increase. In portions of western Montana, water use by people for their homes, lawns, and gardens will likely be the predominant new use. Ground water permit exemptions do not create a domestic use priority. They are, however, providing an incentive resulting in development of individual wells rather than community public water supply systems. Large scale increase in individual wells are likely to further complicate water allocation under the "first-in-time, first-in-use" system.

Federal Constraints

Water use in Montana is subject not only to state water law, but also to federal statutes, regulations and licenses. Several Montana rivers host dams and reservoirs constructed by the federal government as well as private parties such as investor-owned utilities. The operation of dams and reservoirs and the river flows that they support are affected by laws such as the Endangered Species Act (ESA), the Clean Water Act, and Flood Control Acts, by licenses issued

[45]Doney, *Montana Law Handbook*, published by the State Bar of Montana, October 1981, page 75. Ground water rights do not have the right to unchanged conditions, as do surface rights.

[46]DNRC evaluates this test on a calculated rather than a measured basis, i.e., an adverse effect need not be measurable. For example, a small diversion upstream of the hydropower generator may not have a measurable impact on the generator's use of water to produce electricity. However, as long as the hydropower water right holder can show a calculable impact of the diversion, an adverse effect would exist.

[47] Unpublished DNRC paper entitled "Effects of Exempt Wells on Existing Water Rights" provided to the Water Policy Interim Committee at is January 15-16, 2008 meeting.

by the Federal Energy Regulatory Commissions, by federal treaties, and by contracts among utilities.[48] These constraints are outside of the state water right framework and, in theory, do not conflict with water rights. However, by requiring reservoir drawdowns, spill at dams, and flow augmentation measures, these requirements may affect the physical and/or legal availability of water. Because of the Supremacy Clause of the United States Constitution, conflicts between implementation of federal statutes and state law are likely to be resolved in favor of federal obligations.

The operation of Hungry Horse and Libby dams in the Clark Fork River basin are illustrative. Both are subject to requirements resulting from the listing of anadromous fish stocks downstream in the Columbia Basin. As a result of litigation, a United States District Judge has rejected the 2000 and 2004 biological opinions for the Federal Columbia River Power System written by the National Marine Fisheries Service (NMFS) to satisfy the legal requirements of the ESA. In the absence of an acceptable biological opinion, this judge has adopted specific requirements for the operation of the Columbia River dams, including Hungry Horse and Libby, addressing reservoir drawdowns, spill, and flow augmentation. The judge has recently written that should NMFS fail again to produce an acceptable biological opinion, he may issue a "...permanent injunction directing the Federal Defendants to implement additional spill and flow augmentation measures, to obtain additional water from the upper Snake and Columbia River, or to implement reservoir drawdowns to enhance in-river flows."[49] Because the Libby and Hungry Horse reservoirs are two of the four largest storage reservoirs in the Columbia River basin, these spill, flow, and drawdown measures may limit the water available from them for use by Montana water users. ESA and other constraints also exist east of the Continental Divide in the Missouri River basin.

Summary

Discussions of Montana water law assume that it is governed by the doctrine of prior appropriation, first-in-time, first-in-use. As this paper has shown, the lack of institutional capabilities and resources and growing demands for a limited resource are eroding the effect of this doctrine. The era in which new and expanded water uses are provided via new surface water rights is essentially over. The growing development of ground water and recent court rulings and legislation increases both the importance and complexity of managing ground and surface water interactions. Unlike other prior appropriation states, Montana does not provide a general priority for domestic water uses. The ground water permit exemption and DNRC's interpretation of combined appropriations of ground water has increased reliance on individual wells for domestic water supply. The burden measured in time and dollars on individual water right holders to define, enforce, protect, and/or change water rights threatens the viability of the rights themselves. In addition, federal laws, regulations and licenses increasingly constrain water management and use outside the framework of state water law.

[48]For specific examples of such constraints applicable to the Clark Fork River Basin, see *Clark Fork Basin Watershed Management Plan,* Chapter 5, Legal and Regulatory Constraints to Water Management, pages 68-72, September 2004.

[49]James A. Redden, United States District Judge, District of Oregon, memorandum to Counsel of Record in Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., CV 01-640 RE, and American Rivers v. NOAA Fisheries, CV 04-00061 RE, December 7, 2007.